May: but it was not my fortune to ſee them ſooner; which if I had, I might have been able probably to have made my account better. But notwithſtanding it is imperfect, it may, I hope, introduce better from others: or however be a teſtimony of my great Veneration for the Auguſt Royal Society, and obedience unto the commands thereof, who at one of their Meetings ſome time ſince, were pleaſed to deſire me to procure, or give an account of this matter.

IV. *Some Obſervations concerning the Invention and Progreſs of Printing, to the Year* 1465. *Occaſioned by by the Reverend Mr* Ellis's *Letter, exhibited in* Phil. Tranſ. *No* 286. *Pag.* 1416.

WHat this Gentleman ſays about the Books Printed at *Harlaem* by *Laurence Koſter*, agreeing ſo well with the account given by *Theodore Schrevelius* and others, leaves us little or no room to doubt (who muſt needs take it for granted that his Obſervation is accurate, and the *Dates* to be true;) whether the Honour of the Invention be due to *this* or the other Cities, whoſe Writers have ſo eagerly contended for it; ſince none of them have pretended to ſhew any Book Printed ſo ſoon as *A. D.* 1430 or 1432, or near that time. But the difficulty lies, either in ſhewing why the Practice of this Art ſhould be at a ſtand from *A. D.* 1432. to the noted Reviving of it at *Mentz* by *John Fuſt* and *Peter Schoeffer*, who (as it has been vulgarly, but erroneouſly ſaid) did Print the firſt Printed Book there *A. D.* 1465. namely, *Tully's Offices*: or elſe, in giving any tolerable account of the Progreſs of this Invention during an Interval of above 30 years.

Boxhornius (as I remember) as well as *Schrevelius* and other Authors, do expreſsly ſay, (and if they had not, it might well be imagin'd) that *Koſter* could not advance this Invention ſo far, as to Print ſo large a Work as the *Speculum Salutis* without gradual Improvements; and that his firſt Eſſays were on looſe and ſmall *leaves* of Paper, before he attempted *whole Books*. Theſe being looſe and ſingle, are ſuppoſ'd to be all loſt: but I once obſerv'd a looſe leaf of Paper *in Octavo*, lying in an old MS. *Breviary* in her Majeſty's Royal Library at *St James's*, which I then thought (and am ſtill in the ſame opinion) that 'twas one of *Koſter's* firſt Pieces; done when he had attain'd to ſome Experience in the Art, and to get Money. 'Tis a little rude Wooden Cut, of the five Wounds of our Bleſſed Saviour, and the Inſtruments of his Paſſion, with a *Latin* Inſcription at the bottom, to this purport, that Thoſe who ſhould ſay ſo many *Ave Maria's* before it, ſhould have ſo many thouſand years of Pardon. In this Cut or Print, the Ink which made it was *Writing Ink*, and 'twas all Black, without thoſe other Colours with which *Koſter* ſeems afterwards to have adorn'd his Books.

In the abovementioned *Boxhornius's* Book *de Origine Artis Typographicæ*, 'tis ſaid, that *Hadrianus Junius* had a Book Printed by *Koſter*, and like that kept in the Cheſt at *Harlaem*: Now amongſt thoſe Bequeath'd to the *Bodleyan Library* at *Oxford*, by Mr *Francis Junius* (who was a Kinſman of *Hadrian's*) there is a thin Book in a ſmall Folio (Numbred 31.) which may probably be the ſame; and which Mr *Foſs*, a learned and curious *Daniſh* Gentleman, did aſſure me was very like to that at *Harlaem*. This contains the Sum of the *Hiſtory of the Old Teſtament*, all repreſented in rude Wooden Cuts, colored with divers colors, without *Shadows* like to our *Cards*, (which, with *Sheet-Ballads*, are remains of the old manner of Printing,) and Stamp'd upon one Side only; the white ſides of two Leaves being paſted to-

together; the Black both in the *Pictures* and *Inſcriptions* which ſhew the meaning of them, being * *Writing Ink*, (as the aforeſaid Leaf) inartificially ſpread upon the Wooden Block; here thick, there thin; ſpreading and yellowiſh; the Letters extreamly rude, and all together manifeſtly ſhewing that the Art was yet in its Infancy. The Stamping of this Book on one Side only, was not (as ſome think) becauſe the *Printer* did not know how to diſpoſe the Pages in ſuch manner, as might be proper and eaſy for the *Book-Binders* uſe; for it has its *Signatures* all along in *Minuſcule Letters*, (ſet in the middle of the Page, which is remarkable;) but becauſe it was thought that the Paper would not bear a ſecond Impreſſion on the back ſide; juſt as the *Book-writers* of thoſe times (when Paper began to be cheap, and to be made up into Books) would yet have the firſt and laſt Leaf of each *Quaternio*, *Senio*, &c. to be of *Parchment* for ſtrength's ſake. This Book (as I remember) is imperfect, and has no *Date* now appearing, and perhaps never had any; neither has ſuch another Book as this, which contains the *Hiſtory of St John and the Apocalypſe*, in ſuch like wooden coloured Pictures and Inſcriptions. This is inſcribed *L A U D. E.* 65. in the ſame *Bodleyan Library*, and has its *Signatures* alſo in *Majuſcule Letters* (as indeed I have obſerved *Signatures* in many MSS. of different Ages, as high as 1000 years ago and upwards, expreſſed either by *Letters* or *Numbers*.) This Book, tho Printed on one Side, and Paſted as the former; is yet more elegant, and ſhews that the Art was much improved. And here it may not be impertinent to obſerve, that in the ſame Library (*Arch. B. Bodl.* 88.) is an antient MSS with the ſame *Figures* and *Inſcriptions*, tho the *Habits* of the Figures be different, thoſe of the MS being of the older Faſhion, and 'tis very

* It is to be wiſh'd that Mr *Ellis*, when he had *Koſter*'s Books in his Hands, had obſerv'd whether the *Black Ink*, was *Printing Ink* or not; whether *Koſter*'s Picture was antient, and colour'd or not; or if there were more in either of the Books; whether the whole was Cut upon Wood, or Compos'd with *Printing Letter*; whether there were *Signatures* for the *Book-Binders*, &c.

very likely that there is another Copy of this Book in the *Emperors* Library at *Vienna*; for *Lambecius*, *Comment. de Biblioth. Caſ. Lib. II. Pag.* 772. reckons amongſt thoſe which he brought away from the *Archi-ducal* Library at *Inſpruck*, a Book of which he gives this Account, *Apocalypſis S. Joannis Apoſtoli & Evangeliſtæ Latino Germanica, chartacea in folio, una cum Vita ipſius, & mullis figuris ligno inciſis, quæ propter vetuſtatem ſuam ſpectatu ſunt digniſſimæ*, and in this Book at *Oxford*, beſides the Printed Cuts, alſo a *Commentary* upon the *Apocalypſe* in *High-Dutch*. Beſides theſe two moſt antient Printed Books, Mr *Bagford* told me that in the *Manuſcript Library* of *Corpus Chriſti* or *Bennet College* in *Cambridge* he ſaw a third, containing the *Hiſtory of our Saviour*, Printed on one Side only of the Paper, with ſuch like Wooden Cuts; but yet more neatly than either of the former, which I had before ſhewn him at *Oxford*. And theſe three Books, being as is before ſaid, Stamp'd but on *one ſide* of the Leaf; the whole *wrought* or *cut upon Wood*; not *Set* or *Compoſed* with *Printing Letter*; and Printed with *Writing Ink*; do ſufficiently demonſtrate that the Art was as yet in its Infancy; and may, tho they bear no Workmons Name, be very reaſonably aſcribed to *Koſter*, not only becauſe no body elſe lays claim to 'em, but becauſe in divers Circumſtances they agree with the Hiſtory of the Man, and with what remains of his Workmanſhip. If it be asked why *Koſter* did not ſet his Name, and the Year to theſe Books, as well as to that at *Harlaem*, mentioned by Mr *Ellis*? It may be anſwer'd, that *Schrevelius* tell us that *Koſter* bound *Fuſt* above-mentioned, by Oath to ſecrecy, and not to betray the Art to any perſon whatſoever. Wherein 'tis likely, that his deſign was not ſo much to let the World think, that he had a new way of multiplying the Copy of a Book much quicker than the quickeſt Penman; but that he deſigned to Impoſe upon the World, by ſelling his *Printed Books*, for New-Written Copies, whereby the *Book-Writer* and *Illuminator* muſt (as he might well pretend) be ſo paid

for

for their Work, as to maintain themſelves and Families. This Trick might be long undiſcovered in and about *Harlaem*, becauſe there was no other Printing, whereby this might be condemn'd; but at length, as *Boxhornius* and *Schrevelius* write, *Fuſt* ran away with all his Maſters Tools and Materials, and in Proceſs of time ſet up a Printers Shop at *Mentz*, being aſſiſted by his Servant *Peter Schoeffer* (a Young Man of a good Genius) who afterwards Married his Daughter, and became his Partner in the Buſineſs. The Story goes, that this *John Fuſt* went to *Paris* (but whether before or after his ſettling at *Mentz*, I cannot tell:) and that he there offer'd a great number of *Printed Bibles* to ſale, as if they were *Manuſcripts*. But the *French* were not to be ſo caught. They conſidered the number of theſe Books, and their exact conformity to one another throughout the whole, to a Line, a Word, a Letter, a Point, and that the beſt of *Book-Writers* could not be thus exact, and therefore by Indicting him of *Diabolical Magic* (or threating him with it) they at once gave birth to the Story of *Doctor Fauſtus*, and cauſed him to diſcover the Art. And I doubt not but about this time, very many Books were Printed and Sold for Manuſcripts, I having ſeen divers ſuch Books without Dates, which look'd rather older than any I have ſeen with them. I ſpeak now of thoſe that are Set or Compos'd of *Letter*, which with *Printing-Ink* of Lamp-Black and Oyl, and the *Printing-Preſs*, is ſaid to be the Improvement of *Schoeffer* above-mentioned, tho *Schrevelius* with leſs reaſon aſcribes the two former to his Countryman *Koſter*.

When *Fuſt* and *Schoeffer* began firſt to Work at *Mentz* is uncertain, but the firſt mention I find of him, as a Printer at *Mentz*, is in *Schrevelius*, *Harlem pag.* 272. where he ſays that this *Fuſt* (or *Fauſtus* as he calls him) publiſhed *Alexandri Doctrinale cum Petri Hiſpani tractatibus A. D.* 1442. but this and ſome other Books mentioned by Writers on this ſubject, are never ſaid to be extant in any *particular place*, in order to be *conſulted* upon occaſion; and therefore their *Titles*

and

and *Dates* are not ſo much to be relied upon. But another Date, which tho not ſo *Old*, is more *Authentic*, may be found in the above-cited Book of *Lambecius*, Pag. 989. where he ſays he brought away from *Inſpruck* amongſt other choice Volumes, and placed in the *Imperial* Library at *Vienna*, a Pſalter Printed upon *Parchment*, with this Inſcription at the end, *Præſens Pſalmorum codex venuſtate Capitalium decoratus, Rubricationibuſq; ſufficienter diſtinctus, adinventione artificioſa imprimendi ac characterizandi, abſque calami ulla exaratione ſic effigiatus, & ad euſebiam dei induſtrie eſt conſummatus per* Johannem Fuſt, *Civem Moguntinum, & Petrum Schoffer de Gernszheim, anno Domini milleſimo* CCCCLVII. *in Vigilia Aſſumptionis*. From this time there are conſtant Remains of the Induſtry of theſe Men, and I can mention more Books Printed by them, than the *Durandus* (in the Library of *Baſil* in *Switzerland*) Printed (as a Gentleman who ſaw it, told me) *A.* D. 1458. *Joannes Joannenſis*'s *Catholicon* (in her *Majeſty's* and the *Lord Biſhop* of *Norwich*'s Libraries,) Printed 1460. The *Latin Bible* of 1462, yet extant in the *French Kings* Library, and in divers *Monaſteries* beyond the Seas, and perhaps in *England*. The *Tully's Offices* Printed both in 1465 and 1466, (if both theſe be not the ſame Edition, the *laſt Sheet* or *Leaf* being Compos'd afreſh:) and ſo on till *Schoeffer* work'd for himſelf after the Death of *Fuſt*, and *Schoeffer*'s Poſterity after him. But I willingly forbear the Catalogue, in hopes that this, with that of the other *old Printers* throughout *Europe*, and eſpecially of our *Engliſh Workmen*, with their *Devices*, the *Effigies* of moſt of them, and a multitude of uncommon Remarks relating to *Writing*, *Printing*, *Parchment*, *Paper*, *Binding*, &c. will be communicated to the World, when *Mr Bagford*'s Papers ſhall be digeſted; nor do I think it ingenuous or honeſt to prevent him in theſe his Labors, which have coſt him ſo many Years Pains.

A word or two more I take leave to add, that upon the firſt diſcovery of the Art by *Fuſt* at *Paris*, or at his firſt

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Settlement or publick Profeſſion of it at *Mentz*, it quickly ſpread over the beſt parts of *Europe*, * and was commonly uſed in *other Countries* before 'twas known in *England* (notwithſtanding what ſome Writers do affirm to the contrary;) the firſt Book that we pretend to have been Printed here, being *Hierome* (or rather *Ruſinus*) on the *Creed*, Printed at *Oxford*, *A. D.* 1468.

* From theſe *Places*, and from Books, or parts of *Books*, where, or wherein ſuch ſorts of *Letter* was uſed, the *Printers* do ſtill call their *Letter*, *Italick*, *Roman*, *Engliſh*, &c. *Auſtin*, *Canon*, *Pica*, *Primer*, *Brevier*, &c.

To prove this in ſome meaſure (not to mention the progreſs of *Printing* in other Countries) I inſtance in *Italy*, and particularly *Rome*. Here, not to inſiſt on the large Catalogue of *Printed Books* deſcribed in an Epiſtle to Pope *Xyſtus* IV. Publiſhed at the beginning of the *V. Tome* of the *Bible* printed with *Lyra's Commentaries* at *Rome*, *A. D.* 1472, and tranſcribed by *Boxhornius*; I ſhall only relate the ſum of what I meet with in *Bernard Mountfaucon's Diarium Italicum*, *Tom.* 1. *page* 255, 256. 'Tis that *Joannes Alerienſis*, *in a flattering Epiſtle to Pope Paul* II. (who was elected *A. D.* 1464.) *congratulates him*, *becauſe Printing was firſt us'd at* Rome, *under his Pontificat.* Which if ſpoken of the very firſt practice of the Art at *Rome*, and not of an eſtabliſhed Imprimery, ſeems to be falſe, becauſe this learned Monk, in the ſame place, ſays *he ſaw a Lactantius in the Muſæum* (or Study) *of Monſieur de la Thuilliere*, *which has theſe words at the End*, *Lactantii Firmiani Inſtitutiones cuſæ in venerabili Monaſterio Sublacenſi anno* 1461. *antepenultima Octobris.* Now unleſs a man will ſuppoſe Printing to be invented in this Monaſtery, he muſt believe it to be brought hither from *Rome*, which is but about 20 Miles diſtant from it. And the ſame Author ſays, *that Floravantes Martinellus in his Roma Sacra*, *affirms that Printing was practiſed at* Rome *in the Palace of the* Maximi, *A. D.* 1455, *under Pope* Nicolaus V. *by* Conrad Sweynheim *and* Arnold Pannartz, who were both *Germans*, and continued *Printers* there for many Years after.

The Cuſtom of putting the *Dates* of *Printed Books* at the *End* of them, was taken up in Imitation of divers the middle-aged and recenter Manuſcripts (for I never ſaw or heard of any antient Manuſcript in *Capital Letters*, either *Greek* or *Latin*, which has a *profeſs'd Date* written in the *firſt hand*;) but here the Inſpector ought to be cautious, leſt he be led into an Error: For ſeveral Manuſcripts at the End have a Date, which may be by ſome underſtood of the time when thoſe individual Copies were *written*, whenas they only notifie the time when the *Author finiſh'd his Work*. And ſome of theſe Dates, being printed from the Manuſcripts, have deceived many curious men. For Example, the firſt Edition of *Lyndwood*, *Paulus a Sancta Maria*, and others which I could name. Beſides, ſome Dates in antient Printed Books, being not corrected, are falſe; ſuch as a Book printed in the beginning of the 16th Century, in the Library belonging to the *Aſhmolean Muſæum* at *Oxford*, which thus pretends to 400 or 500 years of Age. A *Julius Hyginus* once ſhewed to me by Mr *Millington* the Bookſeller, printed at *Paris* (as there put down) *An. Dom.* MCCCCXII. inſtead of MCCCCCXII. For the Printer is mention'd as then living in *l' Origine de l' Imprimerie de Paris*. I have indeed a Book wherein, amongſt other Tracts, is one of an old Print, at the end of which there ſeems to be ſuch a Miſtake, tho not ſo eaſily rectified as the former. The words are theſe, *Explicit opuſculum* Enee Sylvii *de duobus amantibus in Civitate Leydenſi Anno Domini Milleſimo* CCCC *quadrageſimo tertio* L E I E N. Now tho' *Leyden* ſeems to be the place *where* 'twas printed, yet 1443 cannot be the time *when*; for juſt before *Sylvius* ſays himſelf, *Vale, ex Vienna quinto Nonas Julias Mo* CCCC *quadrageſimo quarto*. *Sylvius* was elected Pope by the name of *Pius* I. *A. D.* 1458, and died *A. D.* 1464. Now it may ſeem probable, that if this Tract was printed after his Election (as ſuppoſe *A. D.* 1463.) or even after his Deceaſe, his Papal Dignity might have been remembred; If it be judg'd to have been printed

printed before his Election, I know none that will allow of Printing at *Leyden*, (or even in *Lyons*) ſo very early.

One Objection may be urg'd againſt what is ſaid of *Koſter*'s or the old printed Books above-mentioned, being printed upon Paper about *A. D.* 1430, or ſoon after. For ſome Authors are of opinion, that Paper made of Linnen Rags was firſt made at *Baſil*, by ſome *Greeks* who fled out of their Country after the Saccage of *Conſtantinople*, *A. D.* 1452. in Imitation of the *Cotton Paper*, commonly uſed in the *Levant*. But this can have no force, our Paper being much older: For I have a piece, the Writing upon which ſeems to be about 350 years old, and agrees very well with a Charter which I have ſeen of *Thomas Beuchamp* Earl of *Warwick*, bearing date *A. D.* 1358. and 32 *Edw* III. In the Archives of the Library belonging to the RR. Dean and Chapter of *Canterbury*, I ſaw an Inventory of the Goods of *Henry* Prior of *Chriſts Church* there, taken upon his Deceaſe, (as I remember) the 20th year of K. *Edward* III. and this is written upon *Paper*. In the *Cottonian* Library, tho' ſearching after other matters, I could not but obſerve ſeveral Writings upon our *Paper*, in the time of moſt of our Kings and Queens, as high as the 15th of K. *Edward* III. and I doubt not but that there are others more antient in the ſame place. But in the *Eaſt*, the uſe of *Cotton Paper* is much more antient, and I have in the *Bodleyan* Library, ſeen an *Arabick* Manuſcript (amongſt thoſe which the Univerſity bought of Dr *Huntingdon*) written in the 427th of the year *Hegira*, i. e. *A.D.* 1049, and others in the ſame place without Dates, ſeem older.

The Proximity of the ſubject, cauſes me here to take notice, that tho the Invention of the *Rolling Preſs* is commonly aſcribed to *Lipſius*; yet it ſeems older than his time, from a printed Book in the *Bodleyan* Library, placed LAVD. D. 138. This is a *Miſſale ſecundum uſum Eccleſiæ Herbipolenſis* (i. e. *Wurtzburg in Germany.*) *Rodolfus* Arch Biſhop of that Church ſets forth in an Inſtrument at the beginning of the book, the reaſons why he cauſed this Miſſal to be publiſhed, which Inſtru-

ment bears date the 8th of *November* 1481. by which time he orders all the Copies to be finiſhed by *Jorius Ryſer* his Printer, who ſeems to have done ſo, ſince his Name, and this Year 1481, is written at the end of the Book. Inſtead of a Seal to this Inſtrument is an *Engraven Print*, being the *Arms* of the *See* ſupported by 2 Angels, and St *Kilian* (its firſt Biſhop and Protector) behind; as alſo this Prelate's own Arms with thoſe of the *See* in another *Eſcutcheon*, and a very fine *Mantling*. This is extremely well engraven for the time, and equals the performances of ſome of our beſt Workmen at preſent. The evident marks of *preſſure* by the *Plate*, with ſome touches of *Ink* at the *Edges*, the *roughneſs* of the Print, and other Circumſtances concurring, I thought this muſt needs be wrought off at the *Rolling-preſs*. But being unwilling to rely too far upon my own Judgment, I ſhewed it to divers very knowing and curious Gentlemen, to ſeveral *Printers*, *Engravers*, and others working conſtantly at the *Rolling Preſs*, who all concurr'd (tho at different times, one not knowing what another had ſaid) that 'twas not only excellently well engraven (and this before *Albert Durer*'s time) but that it was certainly pull'd from the *Rolling-Preſs*, and could be done no other way. And that this Print was not done after that time, appears from ſeveral Notes written here and there in the Book. One of them ſpecifies that *William Kewſth*, Vicar of St *Bartholomew*'s Church in *Wurtzburg*, bought this Book the ſame year, 1481, paying 18 *Florins* for the *Parchment*, *Printing*, *Rubrication*, *Illumination* and *Binding*. By another it appears, that he gave it to his Church for ever. And by ſome others it appears that it remained there during the times of his ſeveral Succeſſors, till the laſt Age, when, as I ſuppoſe, the *Swedes*, under *Guſtavus Adolphus*, plunder'd the Church, and brought it out.